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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/857,497

11/07/2001

Zvi Slovin

233-94

6308

23117

7590

01/12/2006

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901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER

NGO, NGUYEN HOANG

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/857,497	SLOVIN, ZVI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Nguyen Ngo	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on amendment filed 10/27/2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

This Communication is in response to the amendment of 10/27/2005. All changes to the Abstract, Specification, and Claims have been entered. Accordingly, Claims 1-5 are currently pending in the application.

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the analog converter and packet switcher located in the subscriber unit must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leuca et al. (US 2002/0041593), in view of Regnier (US 6345047), hereinafter referred to as Leuca and Regnier.

**Regarding claim 1**, Leuca discloses a hybrid communication network comprising a fixed wireless network (wireless local loop system, page 2 [0024]). Leuca further discloses;

from figure 1, of a data network, which includes a packet, switched network using TCP/IP (a data network, page 2 [0026]) and a gateway (gateway 130) that maintains routing information to fixed wireless network and PSTN (PSTN gateway unit, page 2 [0032]).

of communication paths (at least one data line, 23a of figure 1) that connect gateway 130 to the base station (base station (110) connected to the gateway (130) unit via a respectively corresponding one of said at least one data line (23a), BS 110 of figure 1).

of remote units that is connected to base stations by airlink channel 23b (wireless subscriber units (remote units) communicating wireless with the base station, page 2 [0030]) and further discloses that the remote units is connected to wireless telephone device 40 (interface to at least one host including a telephone host (wireless telephone 40), figure 1 and page 2 [0030]).

of the base station that identifies the destination identification number, held in packet payload and determines the subscriber service associated (switching) with the destination number (base station is operative to perform packet switching on incoming IP packets (packet payload) based on an IP destination address included in each said incoming IP packet, page 3 [00440-[0045]).

that the gateway 130 performs internetworking functions, packetization and depacketization (translate packets) between a fixed wireless subscriber and a analog POTS user (gateway unit operative to switch incoming data packets onto the data network (internetworking functions), to translate incoming voice packets from IP packet

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format into analog voice representation (for analog POTS user) and to switch said analog voice representation onto the PSTN (from analog POTS user), page 2 [0033]).

Leuca however fails to disclose the limitation of an analog converter and a packet switcher in each subscriber unit. Lueca however discloses of an D/A converter and a A/D converter that performs conversions of digitally sampled speech signals to analog speech signals (page 3 [0038]) and further discloses that the base stations packetizes the information received from the remote units (page 4 [0048]), thus providing the motivation to incorporate some sort of analog converter to translate IP packets into analog voice representation so that POTS and wireless service subscribers may efficiently route packets, such as digitized voice over a hybrid network operating in both circuit switched and packet switched modes.

Regnier however discloses of a subscriber side for use with the PSTN and Internet network (col9 lines 14-15) that incorporates a converter for converting signals from the PSTN telephone terminal into IP packets representing a telephone call and vice versa (analog converter operative to translate incoming information in IP packet format into analog voice representation and to feed said analog voice representation to the telephone host and vice versa, figure 2 and col9 lines 25-27) and further discloses that the subscriber apparatus comprises a subscriber line monitor for determining and controlling a telephone call through the subscriber side, so that data may be pass to a computer through the computer interface in IP packet format or to a telephone terminal

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through the telephone interface in analog format (figure 2). The Examiner interprets the subscriber line interface and monitor (200 of figure 2) to correlate to a switch that can pass IP packets to the computer interface or pass IP packets to the converter for analog conversion to the telephone terminal (packet switcher). Regnier further discloses that the apparatus and method may be implemented in a wireless subscriber service (col23 lines 27-34), thus it would have been obvious to a person skilled in the art to incorporate the analog converter (230 of figure 2) and packet switcher (200 of figure 2) as disclosed by Regnier into the system for managing the routing of packets over a hybrid communication network as disclosed by Leuca to efficiently route packets, such as digitized voice over a hybrid network operating in both circuit switched and packet switched modes to the correct destination (computer terminal or telephone terminal).

**Regarding claim 2**, the combination of Leuca and Regnier discloses all the limitation of claim 2, more specifically, Leuca discloses that the remote unit interfaces wireless subscriber's telephone, laptop computers, fax devices, and other wired or wireless modem communication systems (page 2 [0027]).

**Regarding claim 3**, the combination of Leuca and Regnier discloses all the limitation of claim 3, more specifically; Leuca discloses the communication paths 23a be a number of wire-line transport services (page 2 [0030]).

**Regarding claim 4**, the combination of Leuca and Regnier discloses all the limitation of claim 4, more specifically; Leuca discloses the data network includes packet switched networks using protocols such as TCP/IP (page 2 [0026]).

**Regarding claim 5**, the combination of Leuca and Regnier discloses all the limitation of claim 5 as discussed with claim 1. Claim 5 is simply the method of the system disclosed in claim 1. Leuca further discloses the method and system for managing routing of packets over a hybrid communication network.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Kim (US 6977920), CDMA Mobile Data Communication System And Method Of Wireless Data Communication Using The System.

b) Hjalmtysson et al. (US 6400816), Network-Independent Communication System.

c) Csapo (US 5910946), Wireless Internet Network Architecture For Voice and Data Communications.



d) Sienel et al. (US 6426942), Device and Method For Establishing A Call Connection.

e) Kimbal (US 5953322), Cellular Internet Telephone.

f) Jacobi et al. (US 6249531), Universal Voice/Fax/Modem Line Over Compressed Data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Ngo whose telephone number is (571) 272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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SUPERVISORY PATENT EXAMINER